

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Article Number: 7010 2780 0001 2210 3558

Mr. Curt Gardner
EHS Manager
BASF
Agricultural Division
3150 Highway JJ
Palmyra, Missouri 63461-2611

Dear Mr. Gardner:

RE: Corrective Measures Study, dated April 29, 2009, for BASF (Formerly American Cyanamid Company) Hannibal, Missouri
EPA RCRA I.D. Number MOD050226075

The U.S. Environmental Protection Agency in coordination with the Missouri Department of Natural Resources (the department) Hazardous Waste Program has completed a review of the Corrective Measures Study (CMS) dated April 29, 2009, for the BASF facility. The CMS shall be revised to incorporate the following comments.

General

1. BASF shall update the CMS to reflect current site conditions, well networks, etc. since the time that the report was originally submitted in April of 2009.
2. BASF references an excavation management plan in the CMS. The plan will be necessary to protect onsite or contracted workers in the event soils are excavated within contaminated areas at the facility. The CMS does not have to include a detailed plan, rather an acknowledgement that a plan will need to be developed, and approved by EPA and the department. Such a plan is required if BASF intends to leave contamination in the soil onsite as indicated by the Preferred Corrective Measures Alternative in Section 8 of the CMS. An excavation management plan will have to be submitted to the EPA and department for review and approval.
3. Throughout the CMS, BASF references activity and use limitations and access restrictions. BASF shall update these sections to include a reference to the Missouri Environmental Covenants Act.

BASF shall be aware that activity and use limitations and access restrictions are not a substitute for remediation. BASF shall include a summary of options to conduct source area removal of contamination under buildings during renovation, demolition, or other events where the contaminated soil may become accessible.

AWMD/RCAP/MD:bft:09/16/11:H:AWMD/RCAP/Cores11/MD:BASF.CMS.comments.091511.doc

RCAP 	RCAP
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09/16/11	09/16/11



4. Page 23, Section 4.5, Target Objectives for the Corrective Measures: BASF proposes Region 6 Human Health Medium-Specific Screening Levels for industrial outdoor workers as the criteria for evaluation of alternatives. The EPA and department agree that this is acceptable. However; these levels shall not be used for screening of contaminants for investigation and delineation purposes or as final clean-up numbers.
5. Page 51, Disposal: BASF indicates that excavated waste material would be *assumed* non-hazardous and manifested, transported, and disposed of at an appropriate facility. The EPA and department do not agree that *assuming* excavated waste material is non-hazardous is acceptable. Please revise this statement to be consistent with the previous statement in the "Disposal" section about characterizing the waste prior to disposal.
6. Page 74, final paragraph, second sentence: BASF shall correct the statement that "IRZ in **GW-3** is..." to read "IRZ in **GW-4** is..."
7. BASF does not propose any final cleanup values or risk assessment options in the CMS. BASF shall identify the final cleanup goals as any of the following: non-detect; risk-based standards (calculated using a site-specific risk assessment); below the EPA Regional Screening Levels for residential soil; below site background for soil and groundwater; below Maximum Contaminant Levels.

If BASF elects to conduct a site-specific risk assessment, or calculate site-specific cleanup goals, such calculations will be subject to EPA and department review and approval. The risk assessment currently being conducted for the incinerators may not apply to site wide conditions or adequately address the CMS alternatives.

8. If contamination will remain onsite at levels above cleanup goals, BASF must develop a plan to implement an Engineering Control/Institutional Control plan to address the contamination remaining on site.

Please revise the CMS in accordance with the above comments and within thirty (30) days of your receipt of this letter submit two (2) copies of the revised CMS to Mike Dandurand, U.S. Environmental Protection Agency, AWMD/RCAP, 901 N. 5th Street, Kansas City, Kansas 66101 and three (3) copies to Mr. Richard Nussbaum, P.E., R.G., Chief Permits Section, Hazardous Waste Program, P.O. Box 176, Jefferson City, Missouri 65102-0176. If you have any questions on the information in this letter, you may contact me at (913) 551-7504.

Sincerely,

Mike Dandurand, P.E.
Environmental Engineer
RCRA Corrective Action and Permits
Air, RCRA, and Toxics Division

cc: Tom Donohue, Pfizer
Darleen Groner, MDNR



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

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Sincerely,



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Environmental Engineer
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Air, RCRA, and Toxics Division

cc: Tom Donohue, Pfizer
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Mr. Curt Gardner, P.E.

EHS Team Member

BASF Corporation - Agricultural Div.

3150 Highway JJ

Palmyra, Missouri 63461-2611

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